REMARKS

Applicant respectfully requests reconsideration of this application. Claims 1-38 are pending. Claims 1-6, 9-18, 20-35, 37 and 38 are rejected. Claims 7, 8, 19 and 36 are objected to as being dependent upon a rejected base claim.

The Office Action mailed on July 15, 2003, rejects Claims 1-6, 9-18, 20-35, 37 and 38 under 35 USC 102(b) as allegedly being anticipated by DeBrosse et al., U.S. Patent No. 5,534,732 (DeBrosse). Applicant respectfully disagrees and offers the following arguments.

With respect to Claim 1, the Examiner argues that DeBrosse discloses a method of swizzling a set of N concurrently active signal lines into a first order to provide a first stage of capacitive noise cancellation of a first plurality of signal lines of the set (citing Figs. 5, 7, 8, 9, 10 and 11); and swizzling again... to provide a second stage of capacitive noise cancellation, claiming that there is a reordering of the signal lines to restore the initial ordering as in the first region. Applicant respectfully disagrees.

DeBrosse does not disclose or suggest capacitive and inductive noise cancellation, but rather shows a technique for avoidance of capacitive coupling between pairs of true/complement line conductors, and capacitive matching between the true/complement line conductors of a particular pair and those of its neighbor pairs (col. 1, lines 11-15, col. 2, lines 56-67 and col. 3, lines 1-5). For example the signal labeled 2-bar is adjacent to the signals labeled 1-bar and 3 in the first region and then adjacent to their complements labeled 1 and 3-bar in the second region (Fig. 5). Applicant respectfully submits that DeBrosse's capacitive cancellation is due to his technique of matching adjacencies among the true/complement line conductor pairs. Therefore, it is applicable only to interconnects having paired true/complement lines (col. 3, lines 28-31 and col. 5,

lines 11-14) and does not anticipate the capacitive and inductive noise cancellation set forth in Claim 1.

Additionally, Claim 1 sets forth swizzling the set of N concurrently active signal lines again... to provide a second stage of further capacitive and inductive noise cancellation. Applicant respectfully differs with the Examiner's assertion that DeBrosse suggests reordering signal lines a second time even if to restore an initial ordering. On the contrary, DeBrosse teaches away from reordering the signal lines more than once (col. 3, lines 22-24 and col. 7, lines 63 through col. 8, line 2) saying, "An object of the present invention, therefore, is to attain... properties of a 'multiple' twist interconnection array, while only introducing one crossing region into the array." (col. 5, lines 7-10, emphasis added)

Therefore, Applicant respectfully submits that Claim 1 is not anticipated by DeBrosse. Accordingly, Applicant requests the Examiner to withdraw his rejection of Claim 1 under 35 USC 102(b).

With regard to Claims 14 and 28, Claim 14 sets forth a set of N signal lines configurable to transmit N bits of information in a transmission cycle. Applicant respectfully submits that DeBrosse relates to an interconnection array of paired true/complement line conductors (col. 1, lines 10-12, col. 3, lines 28-31 and col. 5, lines 11-14). Therefore, N signal lines of DeBrosse carry N/2 bits of information in a transmission cycle.

Further, as discussed above with reference to Claim 1, DeBrosse teaches away from reordering the signal lines more than once (col. 3, lines 22-24, col. 5, lines 7-10 and col. 7, lines 63 through col. 8, line 2). Applicant intends that both Claim 14 and Claim 28, set forth a first signal line order, a second signal line order and a third signal line order. Therefore, DeBrosse does not anticipate Claims 14 and 18.

With regard to the Examiner's argument number 5, Applicant respectfully submits that one can not properly refer to the crossing region of DeBrosse as a second signal line order in contradiction to the teachings of DeBrosse, wherein, "a single crossing region is disposed transverse the paired line conductors such that first and second regions of the line conductors are defined on opposite sides of the single crossing region." (col. 2, lines 40-43) Further, a signal line in the crossing region of DeBrosse begins (at the left) adjacent to a first subset of signal lines according to the first region's line order and ends (at the right) being adjacent to a second subset of signal lines according to the second region's line order. Therefore, the subset of signal lines adjacent to a given signal line in the crossing region would include at least the union of the first and second subsets rather than being disjoint from both as claimed by Applicant.

Accordingly, in light of the above arguments, Applicant respectfully request the Examiner withdraw his rejections of Claims 14 and 28.

With regard to Claim 37, in light of the arguments presented above with reference to Claims 1, 14 and 28, Applicant respectfully submits that DeBrosse teaches away from a plurality of swizzle cells linking segments of the set of N concurrently active signal lines as set forth in Claim 37. DeBrosse instead is directed to a single crossing region (col. 2, lines 40-43, col. 3, lines 22-24, col. 5, lines 7-10 and col. 7, lines 63 through col. 8, line 2).

Further, in light of the arguments presented above with reference to Claims 1, Applicant respectfully submits that DeBrosse does not disclose or suggest transposing near victim signal lines and far victim signal lines in subsequent segments to facilitate capacitive and inductive noise cancellation as set forth in Claim 37. Rather, DeBrosse shows a technique for capacitive matching between the true/complement line conductors of a particular pair and those of its neighbor pairs (col. 1, lines 11-15, col 2, lines 56-67 and col. 3, lines 1-

5) including, "forming a single crossing region including crossing the line conductors of each pair once;" (col. 3, lines 13-15).

Therefore, Applicant respectfully submits that Claim 37 is not anticipated by DeBrosse. Accordingly, Applicant requests the Examiner to withdraw his rejection of Claim 37 under 35 USC 102(b).

With regards to the remaining dependent claims, Applicant respectfully submits that they are allowable at least by their dependence from a patentable independent claim.

CONCLUSION

Applicant respectfully submits the present application is in condition for allowance and such action is earnestly solicited. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call Lawrence Mennemeier at (408) 765-2194.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

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